U.S. Application No.: 10/048,019

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

Cancel Claim 28.

29. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) extend from the working body member (5) in a

staggered formation for forming the circuitous exhaust gas passageway (33).

30. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45.46) are parallel or inclined to each other.

31. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which a cover (30) is provided around the working body member (5) adjacent the heat

exchange fins (45,46) for defining with the working body member (5) and the heat exchange fins

(45,46), the exhaust gas passageway (33).

32. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) extend on respective opposite sides of the

working body member (5) for defining a pair of passageways (33) extending on both sides one

on each side of the working body member (5).

U.S. Application No.: 10/048,019

33. (Currently amended) A heating device as claimed in Claim 32 characterised in that in which the respective passageways (33) merge adjacent the exhaust gas port (45) and adjacent the exhaust gas outlet (34).

- 34. (Currently amended) A heating device as claimed in Claim 28 characterised in that 48 in which the main housing (4) is an elongated main housing defining an elongated combustion chamber (6) extending from an upstream end (7) to a downstream end (8), the exhaust gas port (15) being located adjacent the downstream end (8), and the heat exchange fins (45,46) being located on the working body member (5) adjacent the downstream end (8) of the main housing (4).
- 35. (Currently amended) A heating device as claimed in Claim 34 eharacterised in that in which the working body member (5) extends longitudinally along the main housing (4) from the upstream end (7) to the downstream end (8) thereof, and preferably[[,]] a portion (25) of the working body member (5) extends in a downstream direction beyond the downstream end (8) of the main housing (4), and the heat exchange fins (45,46) are located adjacent the portion (25) of the working body member (5) extending downstream beyond the working body member (5).
- 36. (Currently amended) A heating device as claimed in Claim 28-characterised in that 48 in which the working body member (5) defines a an elongated heating chamber (20) extending between an upstream end and a downstream end for receiving and melting hot melt

U.S. Application No.: 10/048,019

glue therein, and a dispensing nozzle (25) extends from the working body member (5) at the downstream end thereof communicating with the heating chamber (20) for receiving and dispensing melted glue therefrom[[,]], and preferably, the heating chamber (20) is an elongated heating chamber (20) extending between an upstream end (21) and a downstream end (22), the dispensing nozzle (25) extending in a generally downstream direction from the downstream end (22) of the working body member (5).

- 37. (Currently amended) A heating device as claimed in Claim 36 eheraeterised in that in which the heat exchange fins (45,46) are located adjacent the dispensing nozzle (25)[,]], and preferably, the heat exchange fins (45,46) extend transversely from the dispensing nozzle (25) on respective opposite sides thereof in an upstream/downstream direction relative to the heating chamber (20).
- 38. (Currently amended) A heating device as claimed in Claim 36 eharacterised in that in which the dispensing nozzle (25) extends axially from the working body member (5) relative to the heating chamber. (20), and preferably, the dispensing nozzle (25) extends coaxially with the heating chamber (20) from the working body member (5).
- 39. (Currently amended) A heating device as claimed in Claim 36 eharacterised in that in which a glue receiving inlet (23) is provided at the upstream end (21) of the heating chamber (20) for receiving glue into the heating chamber (20) in an elongated stick form[[,]].

U.S. Application No.: 10/048,019

and preferably, the glue receiving inlet (23) receives the glue stick co-axially with the heating

chamber (20).

(Currently amended) A heating device as claimed in Claim 36 eharacterised in

that in which the working body member (5) is located relative to the main housing (4) so that the

heating chamber (20) and the combustion chamber (6) extend parallel to each other.

41. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which a fuel gas inlet (11) is located at the upstream end (7) of the combustion

chamber (6) for receiving fuel gas for converting to heat in the combustion chamber (6).

42. (Currently amended) A heating device as claimed in any Claim 28 characterised

in that 48 in which a gas catalytic combustion element (10) is located in the combustion chamber

(6) for converting fuel gas to heat.

43. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) are adapted for reducing the temperature of the

exhaust gases exiting the exhaust gas outlet (34) to a temperature approximately similar to the

temperature of the working body member.

44. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) are adapted for reducing the temperature of the

U.S. Application No.: 10/048,019

exhaust gases exiting the exhaust gas outlet (34) to a temperature approaching the temperature of

the working body member.

45. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) are adapted for reducing the temperature of the

exhaust gases exiting the exhaust gas outlet (34) to a temperature just slightly above the

temperature of the working body member adjacent the heat exchange fins (45, 46).

46. (Currently amended) A heating device as claimed in Claim 28 characterised in

that 48 in which the heat exchange fins (45,46) are adapted for reducing the temperature of the

exhaust gases exiting the exhaust gas outlet (34) to a temperature not greater than $50^{\circ}\mathrm{C}$ above the

temperature of the working body member adjacent the heat exchange fins. (45, 46), and

preferably, the heat exchange fins (45,46) are adapted for reducing the temperature of the

exhaust gases exiting the exhaust gas outlet (34) to a temperature not greater than 15°C above the

temperature of the working body member adjacent the heat exchange fins (45, 46), and

advantageously, the heat exchange fins (45,46) are adapted for reducing the temperature of the

exhaust gases exiting the exhaust gas outlet (34) to a temperature not greater than 5°C above the

temperature of the working body member adjacent the heat exchange fins (45, 46).

Cancel Claim 47.

U.S. Application No.: 10/048,019

Please add the following new claims:

(New) A heating device comprising:

a main housing defining a combustion chamber within which fuel gas is converted to heat

for heating the main housing,

an exhaust gas port from the combustion chamber for exhausting burnt gases therefrom,

a working body member of heat conductive material in heat conducting engagement with

the main housing for receiving heat therefrom,

a passageway extending from the exhaust gas port to an exhaust gas outlet past the

working body member for accommodating exhaust gases from the exhaust gas port to the

exhaust gas outlet for transferring heat from the exhaust gases to the working body member, and

a heat exchange means comprising a plurality of spaced apart heat exchange fins

extending from the working body member into the passageway for transferring heat from the

exhaust gases to the working body member for reducing the temperature at which the exhaust

gases exit from the heating device through the exhaust gas outlet, the heat exchange fins defining

a circuitous exhaust gas passageway through which the exhaust gases pass between the exhaust

gas port and the exhaust gas outlet.

49. (New) A heating device as claimed in Claim 37 in which the heat exchange fins

extend transversely from the dispensing nozzle on respective opposite sides thereof in an

upstream/downstream direction relative to the heating chamber.

U.S. Application No.: 10/048,019

50. (New) A glue gun comprising:

a main housing defining a combustion chamber within which fuel gas is converted to heat for heating the main housing,

an exhaust gas port from the combustion chamber for exhausting burnt gases therefrom,

a working body member of heat conductive material in heat conducting engagement with
the main housing for receiving heat therefrom, the working body member defining an elongated
heating chamber for receiving and melting hot melt glue therein,

a dispensing nozzle extending from the working body member communicating with the heating chamber for receiving and dispensing melted glue therefrom,

a passageway extending from the exhaust gas port to an exhaust gas outlet past the working body member for accommodating exhaust gases from the exhaust gas port to the exhaust gas outlet for transferring heat from the exhaust gases to the working body member, and

a heat exchange means comprising a plurality of spaced apart heat exchange fins extending from the working body member into the passageway for transferring heat from the exhaust gases to the working body member for reducing the temperature at which the exhaust gases exit from the heating device through the exhaust gas outlet, the heat exchange fins defining a circuitous exhaust gas passageway through which the exhaust gases pass between the exhaust gas port and the exhaust gas outlet.